

Solar activity was at low levels during the period. The first half of the period (15 - 18 April) was dominated with mostly low-level C-class activity from Regions 1719 (N11, L=109, class/area Eki/290 on 12 April) and 1723 (S18, L=200, class/area Dai/200 on 17 April). The largest event during this time frame was a long duration C6 at 18/1823 UTC from Region 1719. Associated with the event was a Type II signature with an estimated plane-of-sky speed of 1273 km/s and a west limb, non Earth-directed coronal mass ejection (CME). The remainder of the period (19 - 21 April) witnessed the rapid emergence on the disk of Region 1726 (N12, L=326, class/area Ekc/260 on 21 April). During this time frame, Region 1726 produced a total of 20 C-class events, the largest was a C4/Sf at 21/1726 UTC. At the time of this report, Region 1726 was continuing its growth phase and maintaining its complex beta-gamma-delta magnetic configuration.

No proton events were observed at geosynchronous orbit. However, the greater than 10 MeV proton flux increased slightly above background levels beginning at about 21/1005 UTC and peaked at about 3 pfu at 21/1640 UTC. The enhancement was likely triggered by activity beyond the west limb from old Region 1719 (N11, L=077).

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels.

Geomagnetic field activity was at predominately quiet levels with an isolated unsettled reading observed during the period 15/1800 - 2100 UTC. The period began under the waning influence of a weak CME. Solar wind speeds were at mostly nominal levels, beginning the period near 450 km/s and exhibited a steady decline to end the period at about 285 km/s. Total interplanetary magnetic field (IMF) readings ranged from a high of 12 nT early on 15 April, declined to 4 nT by early on 16 April and varied between 4 - 6 nT for the remainder of the period. The Bz component of the IMF ranged from +11 nT early on 15 April and declined to about +5 nT by midday on 15 April. Through the remainder of the period, Bz did not vary much beyond +3/-4 nT. The Phi angle was in a negative (toward) orientation through early on 16 April, switched to a predominately positive (away) orientation through about 20/1900 UTC when it became variable through the remainder of the period.

Space Weather Outlook

22 April - 18 May 2013

Solar activity is expected to be at predominately low levels through the outlook period. A chance for M-class activity also exists due to active regions that currently populate the visible disk and active regions due to rotate onto the disk throughout the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels from 22 April - 02 May in the wake of a coronal hole high speed stream (CH HSS).



Normal to moderate levels will predominate from 03 - 18 May.

Geomagnetic field activity is expected to be at mostly unsettled to active levels with isolated minor storm periods from 22 - 26 April due to recurrent (CH HSS) effects. Predominately quiet levels are expected from 27 April - 18 May.



Daily Solar Data

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10 ⁻⁶ hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
15 April	113	99	590	B3.1	3	0	0	2	0	0	0	0
16 April	113	97	460	B3.1	5	0	0	11	0	0	0	0
17 April	108	89	500	B2.8	3	0	0	3	0	0	0	0
18 April	105	86	450	B2.8	2	0	0	1	0	0	0	0
19 April	99	101	300	B2.5	2	0	0	3	0	0	0	0
20 April	105	101	340	B2.7	8	0	0	15	0	0	0	0
21 April	109	76	360	B5.1	13	0	0	30	1	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ² -day -sr)			Electron Fluence (electrons/cm ² -day -sr)		
	>1 MeV	>10 MeV	>100 MeV	>0.6 MeV	>2MeV	>4 MeV
15 April	3.2e+05	3.3e+04	2.4e+03		1.6e+06	
16 April	3.1e+05	2.3e+04	3.0e+03		2.8e+06	
17 April	1.5e+05	1.6e+04	2.8e+03		3.2e+06	
18 April	1.4e+05	1.4e+04	2.7e+03		6.2e+06	
19 April	1.4e+05	1.2e+04	2.8e+03		8.1e+06	
20 April	1.9e+05	1.2e+04	2.8e+03		3.2e+06	
21 April	5.1e+05	9.2e+04	3.1e+03		1.8e+06	

Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
15 April	6	1-1-1-1-2-1-3-2	2	1-1-0-0-0-0-2-1	5	1-1-1-1-1-0-3-2
16 April	2	2-0-0-0-1-1-1-1	2	1-0-0-0-0-1-1-1	3	2-0-0-0-0-1-1-1
17 April	2	0-0-1-0-2-1-0-1	1	0-1-1-0-1-0-0-0	3	1-1-1-0-1-1-0-1
18 April	2	1-0-0-0-1-1-1-1	1	1-0-0-1-1-0-0-0	3	1-0-0-1-1-1-1-0
19 April	1	0-0-0-0-2-0-0-0	0	0-0-0-0-0-0-0-0	2	0-0-0-1-1-1-0-1
20 April	2	0-0-1-1-2-1-0-1	5	0-0-0-4-3-0-0-0	4	0-0-1-2-2-1-0-1
21 April	3	0-0-0-1-2-2-2-0	0	0-0-0-0-0-0-0-0	3	0-0-0-1-1-2-1-1

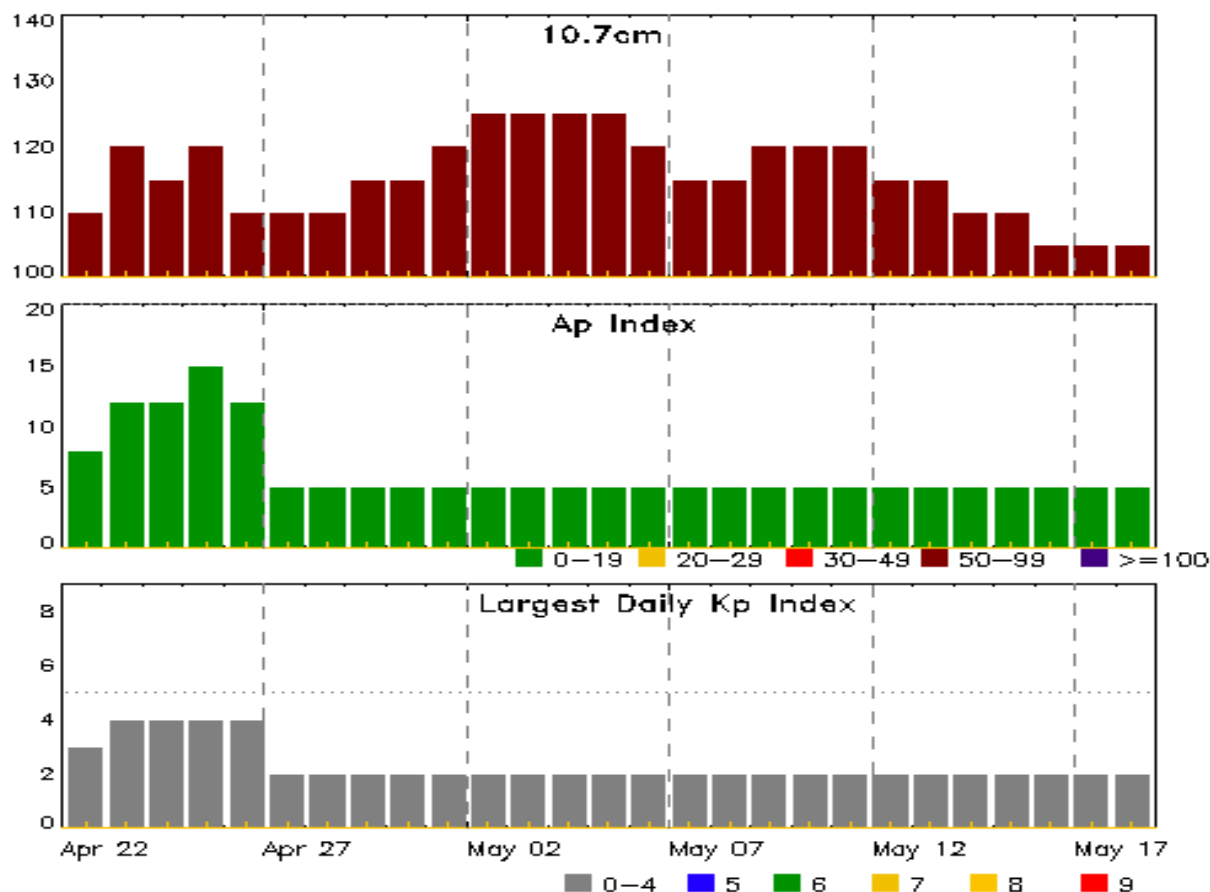


Alerts and Warnings Issued

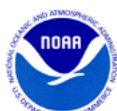
Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
18 Apr 1852	ALERT: Type II Radio Emission	18/1823



Twenty-seven Day Outlook



Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index
22 Apr	110	8	3	06 May	120	5	2
23	120	12	4	07	115	5	2
24	115	12	4	08	115	5	2
25	120	15	4	09	120	5	2
26	110	12	4	10	120	5	2
27	110	5	2	11	120	5	2
28	110	5	2	12	115	5	2
29	115	5	2	13	115	5	2
30	115	5	2	14	110	5	2
01 May	120	5	2	15	110	5	2
02	125	5	2	16	105	5	2
03	125	5	2	17	105	5	2
04	125	5	2	18	105	5	2
05	125	5	2				



Energetic Events

Date	Time			X-ray		Optical Information			Peak		Sweep Freq	
	Begin	Max	Half	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	Radio Flux		Intensity	
			Max						245	2695	II	IV

No Events Observed

Flare List

Date	Time			X-ray Class	Optical		
	Begin	Max	End		Imp/ Brtns	Location Lat CMD	Rgn #
15 Apr	0312	0332	0415	B6.3			
15 Apr	0618	0623	0626	B7.3			
15 Apr	0919	0925	0929	C1.1			
15 Apr	1358	1403	1406	C1.2	SF	S16E28	1723
15 Apr	1605	1610	1612		SF	S17E27	1723
15 Apr	1800	1805	1810	C1.0			1719
16 Apr	0426	0430	0435	C1.5	SF	S19E23	1723
16 Apr	0730	0737	0747	C1.3	SF	S16E18	1723
16 Apr	0751	0752	0757		SF	S21W30	1722
16 Apr	0949	0949	0952		SF	S19E20	1723
16 Apr	1621	1646	1655	C1.7	SF	N08W62	1719
16 Apr	1816	1824	1827	C1.6	SF	N11W62	1719
16 Apr	1935	1938	1941	B6.4			
16 Apr	2117	2132	2154	C3.5			1719
16 Apr	2120	2121	2122		SF	N11W65	1719
16 Apr	2123	2127	2151		SF	N11W66	1719
16 Apr	2239	2240	2244		SF	N12W66	1719
16 Apr	2300	2303	2309		SF	S18W40	1722
16 Apr	2327	2327	2332		SF	S18E10	1723
17 Apr	0257	0301	0311	B7.2			
17 Apr	0438	0443	0449	C1.3	SF	N09W14	1719
17 Apr	0641	0641	0648		SF	S22W35	1722
17 Apr	0837	0847	0856	B7.7			1719
17 Apr	1116	1120	1135		SF	S17W46	1721
17 Apr	1950	2011	2029	C1.3			1719
17 Apr	2049	2052	2057	C1.2			1719
17 Apr	2203	2207	2210	B4.8			
18 Apr	0234	0239	0243	B6.6			
18 Apr	0756	0819	0838	C1.6	SF	N09W79	1719
18 Apr	1756	1823	1904	C6.5			1719
19 Apr	1343	1349	1407		SF	N14E14	1726



Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
19 Apr	1410	1412	1419		SF	N14E14	1726
19 Apr	1437	1444	1453	C1.1			
19 Apr	2215	2221	2226	C1.0			
19 Apr	2309	2312	2314	B6.3	SF	N12E03	1726
20 Apr	0022	0036	0038	C1.5			1726
20 Apr	0025	0025	0027		SF	N12E02	
20 Apr	0036	0036	0041		SF	N12E03	1726
20 Apr	0103	0146	0208	B8.1			1723
20 Apr	0226	0231	0233	C1.4	SF	N12E02	1726
20 Apr	0327	0348	0402	C1.1			1726
20 Apr	0539	0539	0543		SF	N12E01	
20 Apr	0754	0802	0810	C1.4	SF	N14E02	1726
20 Apr	0812	0812	0817		SF	N14W01	
20 Apr	0844	0846	0847		SF	N14W02	
20 Apr	1234	1237	1240	B4.1	SF	N13W03	1726
20 Apr	1329	1329	1331		SF	N14W04	
20 Apr	1708	1716	1724	C1.0			1726
20 Apr	1725	1725	1736		SF	N14W04	
20 Apr	2045	2045	2047		SF	N11W69	1725
20 Apr	2209	2213	2218	C1.1	SF	N13W05	1726
20 Apr	2224	2229	2233	C1.1	SF	N12W06	1726
20 Apr	2246	2252	2259	C1.3	SF	N14W04	1726
20 Apr	2309	2309	2337		SF	N14W04	1726
21 Apr	0102	0109	0116	C3.6	SF	N11W10	1726
21 Apr	0137	0154	0208		SF	N13W07	1726
21 Apr	0226	0229	0237	B7.0			1726
21 Apr	0248	0251	0254	B8.4			1726
21 Apr	0256	0300	0302	C1.0			1726
21 Apr	0504	0514	0518	C1.4	SF	N13W11	1726
21 Apr	0520	0521	0523		SF	N13W10	1726
21 Apr	0557	0600	0602	C2.7	SF	N14W11	1726
21 Apr	0648	0648	0653		SF	N14W10	1726
21 Apr	0707	0710	0720	B8.7	SF	N15W12	1726
21 Apr	0729	0734	0751	C1.3	SF	N12W13	1726
21 Apr	0815	0827	0836		SF	N14W13	1726
21 Apr	0838	0843	0847		SF	N14W14	1726
21 Apr	0913	0923	0934	C2.5	1F	N14W15	1726
21 Apr	1021	1024	1026	C1.8	SF	N14W14	1726



Flare List

Date	Time			Optical			Rgn #
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	
21 Apr	1052	1055	1057	C1.0			1726
21 Apr	1138	1203	1209	C1.0	SN	N14W14	1726
21 Apr	B1254	1300	1310		SF	N12W19	1726
21 Apr	1341	1345	1349		SF	N13W17	1726
21 Apr	1355	1356	1358		SF	N13W17	1726
21 Apr	1401	1420	1426	C2.2	SF	N13W17	1726
21 Apr	1508	1509	1521		SF	N13W20	1726
21 Apr	1533	1533	1541		SF	N13W20	1726
21 Apr	1555	1558	1632	C2.9	SF	N13W18	1726
21 Apr	1745	1746	1755		SF	N13W19	1726
21 Apr	1803	1804	1805		SF	N14W15	1726
21 Apr	1817	1823	1828		SF	N13W20	1726
21 Apr	1833	1838	1846	C4.5	SF	N13W20	1726
21 Apr	1947	1947	1953		SF	N13W18	1726
21 Apr	1959	2015	2032	C2.7	SF	S19W53	1723
21 Apr	2022	2024	2031		SF	N12W18	1726
21 Apr	2047	2048	2053		SF	N12W21	1726
21 Apr	2213	2213	2221		SF	N14W18	1726
21 Apr	2246	2253	2258		SF	N12W21	1726
21 Apr	2303	2304	2307		SF	N12W22	1726
21 Apr	2346	2350	2354	B7.8			1726



Region Summary

Date	Location	Sunspot Characteristics						Flares							
	Lat CMD	Helio	Area 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
		Lon						C	M	X	S	1	2	3	4
Region 1717															
05 Apr	S10E66	89	10	2	Axx	3	A	1							
06 Apr	S12E51	91	10	2	Bxo	2	B								
07 Apr	S13E37	92	10	1	Axx	1	A								
08 Apr	S12E22	92	10	2	Bxo	2	B								
09 Apr	S11E11	91	20	5	Cso	3	B								
10 Apr	S10W01	90	10	3	Bxo	3	B				1				
11 Apr	S12W15	91	plage												
12 Apr	S12W29	92	plage												
13 Apr	S12W43	93	plage												
14 Apr	S12W57	94	plage												
15 Apr	S12W71	95	plage												
16 Apr	S12W85	95	plage												
								1	0	0	1	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 90

Region 1718															
05 Apr	N23E45	110	10	2	Axx	2	A								
06 Apr	N22E33	109	130	7	Dsi	10	BG	5			7				
07 Apr	N20E20	109	140	7	Dai	14	BG	1			4				
08 Apr	N22E07	108	220	8	Dao	34	B				2				
09 Apr	N21W06	108	190	7	Dac	21	BG	5			3				
10 Apr	N22W19	108	280	9	Dkc	34	BG	3			5				
11 Apr	N22W32	108	340	8	Dkc	24	BG	2			9				
12 Apr	N21W46	109	510	9	Dkc	23	BG	3	1		5				
13 Apr	N21W58	108	350	10	Dkc	25	BG	2			4				
14 Apr	N20W70	107	260	9	Dkc	12	BG				1				
15 Apr	N20W84	106	110	10	Dai	4	B								
								21	1	0	40	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 108



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	Helio Lon	Area 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
								C	M	X	S	1	2	3	4
Region 1719															
05 Apr	N08E78	77	90	2	Hsx	1	A	1	1						
06 Apr	N08E66	76	80	2	Cso	4	B	1				2			
07 Apr	N08E53	76	150	6	Dsi	6	BG	1				1			
08 Apr	N07E39	75	240	9	Cao	16	BG								
09 Apr	N10E26	76	160	9	Dai	11	BG					1			
10 Apr	N10E13	76	190	8	Dai	17	BG	1							
11 Apr	N10W00	76	180	11	Eai	20	BGD		1			1			1
12 Apr	N11W14	77	290	11	Eki	22	BG	1				2			
13 Apr	N10W28	78	140	10	Dsi	26	BG	1				1			
14 Apr	N10W41	78	120	10	Dao	11	BG								
15 Apr	N09W53	76	70	6	Cso	4	B	1							
16 Apr	N09W64	74	60	3	Cso	3	B	3				5			
17 Apr	N10W79	75	50	4	Cso	3	B	3				1			
18 Apr	N09W91	74	50	2	Hsx	1	A	2				1			
								15	2	0	15	0	0	1	0

Crossed West Limb.

Absolute heliographic longitude: 76

Region 1721															
10 Apr	S18E35	54	10	4	Bxo	4	B	1			1				
11 Apr	S19E20	56	80	7	Dao	10	BG	1			4				
12 Apr	S18E06	57	220	8	Dai	17	BG				2				
13 Apr	S18W07	57	190	9	Dsi	18	B								
14 Apr	S19W21	58	180	9	Dso	13	B								
15 Apr	S18W33	56	140	11	Esi	12	B								
16 Apr	S18W47	56	110	7	Dao	6	B								
17 Apr	S17W61	57	120	6	Cso	5	B				1				
18 Apr	S17W75	58	100	3	Cso	2	B								
19 Apr	S18W86	57	60	1	Hsx	1	A								
								2	0	0	8	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 57



Region Summary - continued

Location		Sunspot Characteristics						Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10 ⁻⁶ hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
Region 1722															
10 Apr	S20E44	45	20	4	Cso	3	B								
11 Apr	S21E30	46	80	7	Dao	4	B								
12 Apr	S21E17	46	30	6	Dro	4	B				1				
13 Apr	S21E03	47	20	6	Cro	4	B								
14 Apr	S22W11	48	20	6	Cro	4	B								
15 Apr	S21W24	46	30	8	Cao	5	B								
16 Apr	S20W36	45	40	7	Cao	8	B				2				
17 Apr	S19W48	44	90	6	Dao	6	B				1				
18 Apr	S20W62	45	90	8	Dao	10	B								
19 Apr	S21W73	44	40	6	Cao	6	B								
20 Apr	S20W86	44	30	3	Cro	4	B								
								0	0	0	4	0	0	0	0

Crossed West Limb.

Absolute heliographic longitude: 47

Region 1723															
13 Apr	S18E49	1	10	2	Bxo	2	B								
14 Apr	S18E36	1	80	5	Dac	8	B								
15 Apr	S18E20	2	180	6	Dac	12	BG	1			2				
16 Apr	S17E09	1	180	8	Dai	23	BG	2			4				
17 Apr	S18W05	1	200	8	Dai	21	B								
18 Apr	S16W16	1	190	9	Dai	21	B								
19 Apr	S18W32	3	100	8	Dai	14	B								
20 Apr	S19W44	1	60	7	Cao	9	B								
21 Apr	S20W57	1	40	7	Cso	3	B	1			1				
								4	0	0	7	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 1



Region Summary - continued

Date	Location		Sunspot Characteristics					Flares							
	Lat CMD	Helio Lon	Area 10 ⁻⁶ hemi.	Extent (helio)	Spot Class	Spot Count	Mag Class	X-ray			Optical				
								C	M	X	S	1	2	3	4

Region 1724

13 Apr	S27E70	340	40	2	Hax	2	A	1							
14 Apr	S27E58	339	50	2	Hax	3	A								
15 Apr	S27E44	338	60	2	Hax	2	A								
16 Apr	S26E31	338	70	4	Dao	7	B								
17 Apr	S26E19	336	40	2	Cso	4	B								
18 Apr	S26E07	335	20	1	Cso	2	B								
19 Apr	S26W05	335	20	1	Hrx	2	A								
20 Apr	S26W19	336	10	1	Axx	1	A								
21 Apr	S26W32	336	plage												
								1	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 335

Region 1725

19 Apr	N10W58	28	20	2	Cro	2	B								
20 Apr	N10W70	27	10	3	Bxo	3	B				1				
21 Apr	N10W84	28	plage												
								0	0	0	1	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 28

Region 1726

19 Apr	N13E07	323	20	3	Dro	4	B				3				
20 Apr	N13W05	322	180	13	Eai	15	BG	8			7				
21 Apr	N12W22	326	260	13	Ekc	36	BGD	12			29	1			
								20	0	0	39	1	0	0	0

Still on Disk.

Absolute heliographic longitude: 322

Region 1727

19 Apr	N26E57	273	40	3	Dao	2	B								
20 Apr	N25E44	273	50	7	Dao	9	B								
21 Apr	N25E31	273	60	8	Dao	7	B								
								0	0	0	0	0	0	0	0

Still on Disk.

Absolute heliographic longitude: 273

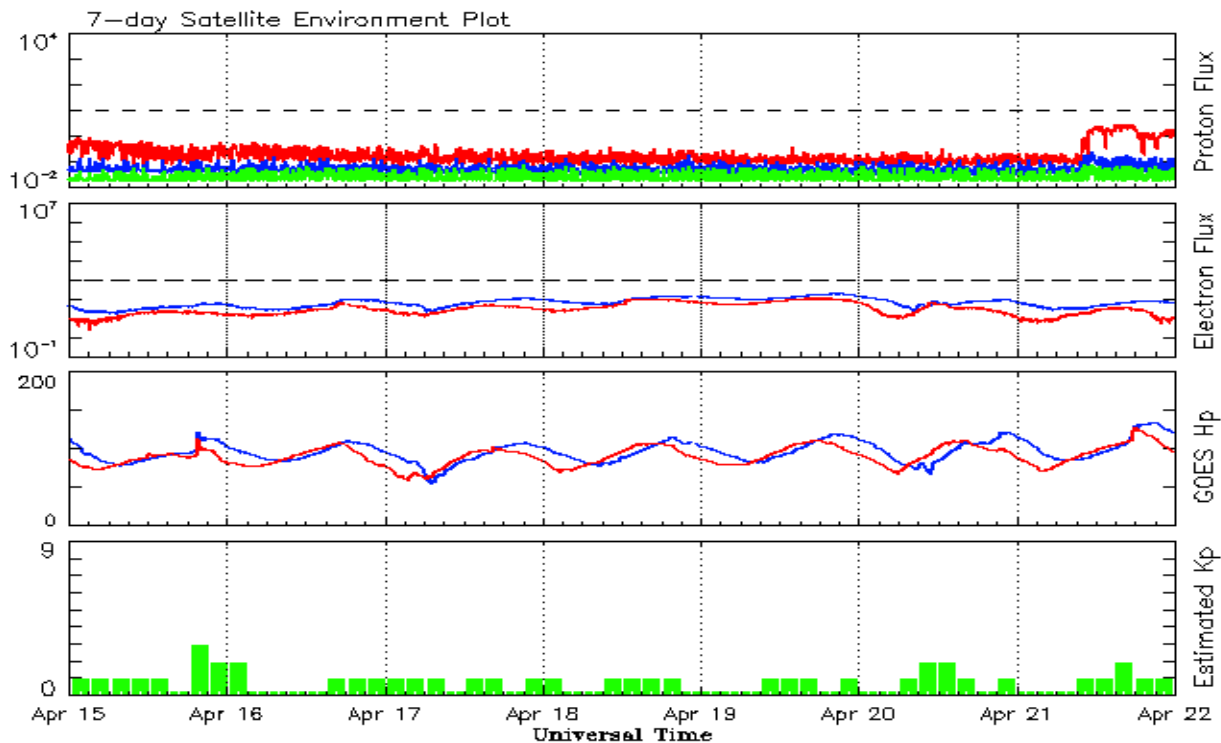


Recent Solar Indices (preliminary)
Observed monthly mean values

Month	Sunspot Numbers					Radio Flux		Geomagnetic	
	Observed values		Ratio	Smooth values		Penticton	Smooth	Planetary	Smooth
	SEC	RI	RI/SEC	SEC	RI	10.7 cm	Value	Ap	Value
2011									
April	81.7	54.4	0.67	61.5	41.8	112.6	100.4	9	7.5
May	61.4	41.6	0.68	69.0	47.6	95.9	105.6	9	7.5
June	55.5	37.0	0.67	76.5	53.2	95.8	110.9	8	7.4
July	67.0	43.8	0.66	82.5	57.3	94.2	115.4	9	7.3
August	66.1	50.6	0.77	84.9	59.0	101.7	117.9	8	7.4
September	106.4	78.0	0.73	84.6	59.5	134.5	118.4	13	7.7
October	116.8	88.0	0.75	84.6	59.9	137.2	118.4	7	8.0
November	133.1	96.7	0.73	86.3	61.1	153.1	119.5	3	8.0
December	106.3	73.0	0.69	89.2	63.4	141.2	121.6	3	8.0
2012									
January	91.3	58.3	0.64	92.0	65.5	133.1	124.4	6	8.3
February	50.1	32.9	0.66	94.2	66.9	106.7	126.7	7	8.4
March	77.9	64.3	0.82	94.1	66.8	115.1	126.8	14	8.1
April	84.4	55.2	0.65	91.3	64.6	113.1	125.8	9	8.0
May	99.5	69.0	0.69	87.7	61.7	121.5	123.8	8	8.2
June	88.6	64.5	0.73	83.9	58.9	120.5	121.1	10	8.3
July	99.6	66.5	0.67	82.4	57.8	135.6	119.5	13	8.3
August	85.8	63.0	0.74	83.1	58.2	115.7	119.2	7	8.1
September	84.0	61.4	0.73	83.7	58.1	123.2	118.9	8	7.8
October	73.5	53.3	0.73			123.3		9	
November	89.2	61.8	0.69			120.9		6	
December	60.4	40.8	0.68			108.4		3	
2013									
January	99.8	62.9	0.63			127.1		4	
February	60.0	38.0	0.63			104.4		5	
March	81.0	57.9	0.71			111.2		9	

Note: Values are final except for the most recent 6 months which are considered preliminary.
Cycle 24 started in Dec 2008 with an RI=1.7.





*Weekly Geosynchronous Satellite Environment Summary
Week Beginning 15 April 2013*

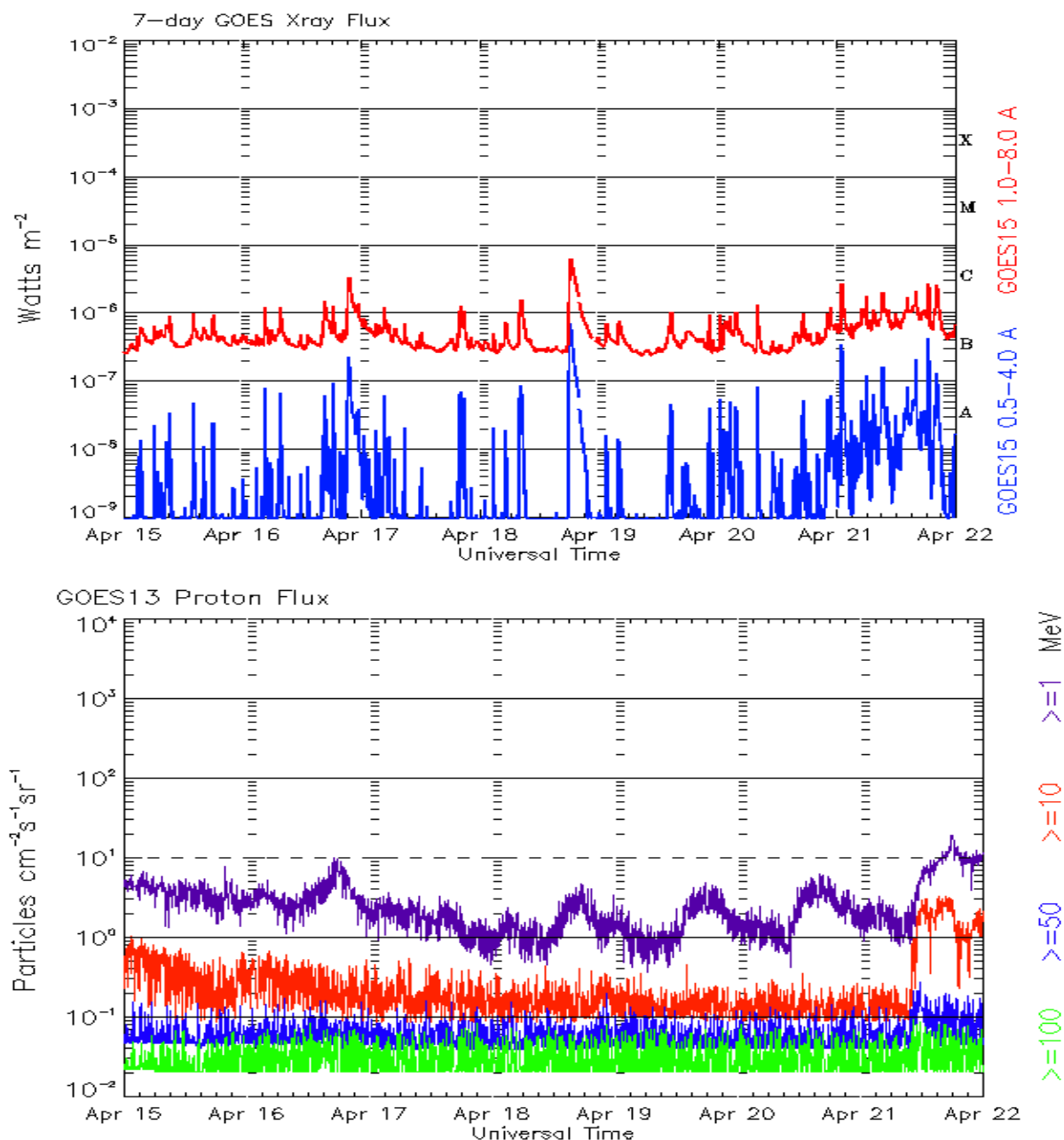
The proton flux plot contains the five-minute averaged integral proton flux (protons/cm²-sec -sr) as measured by the SWPC Primary GOES satellite, near West 75, for each of three energy thresholds: greater than 10, 50, and 100 MeV.

The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm²-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

The Hp plot contains the five minute averaged Hp magnetic field component in nanoteslas (nT) as by the SWPC Primary GOES satellite. The Hp component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

The Estimated 3-hour Planetary Kp-index is derived at the NOAA Space Weather Prediction Center using data from the following ground-based magnetometers: Boulder, Colorado; Chambon la Foret, France; Fredericksburg, Virginia; Fresno, California; Hartland, UK; Newport, Washington; Sitka, Alaska. These data are made available thanks to the cooperative efforts between SWPC and data providers around the world, which currently includes the U.S. Geological Survey, the British Geological Survey, and the Institut de Physique du Globe de Paris.

The data included here are those now available in real time at the SWPC and are incomplete in that they do not include the full set of parameters and energy ranges known to cause satellite operating anomalies. The proton and electron fluxes and Kp are 'global' parameters that are applicable to a first order approximation over large areas. H parallel is subject to more localized phenomena and the measurements generally are applicable to within a few degrees of longitude of the measuring satellite.



*Weekly GOES Satellite X-ray and Proton Plots
Week Beginning 15 April 2013*

The x-ray plots contains five-minute averages x-ray flux (Watt/m^2) as measure by the SWPC primary GOES X-ray satellite, usually at West 105 longitude, in two wavelength bands, 0.05 - 0.4 and 0.1 - 0.8 nm. The letters A, B, C, M and X refer to x-ray event levels for the 0.1 - 0.8 nm band.

The proton plot contains the five-minute averaged integral flux units (pfu = protons/ cm^2 -sec -sr) as measured by the primary SWPC GOES Proton satellite for each of the energy thresholds: >1 , >10 , >30 , and >100 MeV. The P10 event threshold is 10 pfu at greater than 10 MeV.



Preliminary Report and Forecast of Solar Geophysical Data (The Weekly)

Published every Monday by the Space Weather Prediction Center.

U.S. Department of Commerce
NOAA / National Weather Service
Space Weather Prediction Center
325 Broadway, Boulder CO 80305

Notice: The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned.
Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

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